

Recombinant Human Cysteine-rich Angiogenic Inducer 61

#R00143

Size: 5 µg/100 µg/500 µg

Stability & Storage

- Use a manual defrost freezer and avoid repeated freeze-thaw cycles.
- 12 months from date of receipt, -20 to -70 °C as supplied.
 - 1 month, 2 to 8 °C under sterile conditions after reconstitution.
 - 3 months, -20 to -70 °C under sterile conditions after reconstitution.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

Cysteine-rich angiogenic inducer 61 (Cyr61) encoded by the Cyr61 gene is a dynamically expressed, multifunctional matricellular protein and it is also a secreted, extracellular matrix (ECM)-associated signaling protein of the CCN family. Cyr61 plays essential roles in cardiovascular development during embryogenesis and regulates inflammation, wound healing and fibrogenesis in the adult. Aberrant CCN1 expression is associated with myriad pathologies, including various cancers and diseases associated with chronic inflammation. Mature human Cyr61 shares 93% amino acid sequence identity with mouse and rat Cyr61. Cyr61 consists of four domains. There are an IGFBP domain, a VWF type C domain, a TSP type I domain, and a cysteine knot domain.

AA Sequence

TCPAACHCPLEAPKCAPGVGLVRDGC GCKVCAKQ

LNEDCSKTQPCDHTKGLECNFGASSTALKGICRAQS
EGRPCEYNSRIYQNGESFQPNCKHQCTCIDGAVGCI
PLCPQELSLPNLGCPNPRLVKVTGQCCEEWVCDSDS
IKDPMEDQDGLLGKELGFDASEVELTRNNELIAVGKG
SSLKRLPVFGMEPRILYNPLQGQKCIVQTTSSWSQCSK
TCGTGISTRVTNDNPECRLVKETRICEVRPCGQPVYS
SLKKGKKCSKTKKSPEPVRFYAGCLSVKKYRPKYC
GSCVDGRCTPQLTRTVKMRFRCEGETFSKNVMM
IQSCKCNYNCPHANEAAFPFYRLFNDIHKFRD

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.

Product Specification

Synonyms	CCN1, Cysteine-rich Angiogenic Inducer 61, GIG1, IGFBP-10
Accession	O00622
GeneID	3491
Species	Human
Source	Escherichia coli.
Molecular Weight	Approximately 39.4 kDa, a single non-glycosylated polypeptide chain containing 357 amino acids.
Purity	> 95 % by SDS-PAGE and HPLC analyses.
Biological Activity	Fully biologically active when compared to standard. The ED ₅₀ as determined by a cell proliferation assay using murine Balb/3T3 cells is less than 3.0 µg/ml, corresponding to a

	specific activity of > 330 IU/mg.
Physical	Sterile Filtered White lyophilized
Appearance	(freeze-dried) powder.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in citrate buffer solution, 300 mM NaCl, pH 3.0.
Endotoxin	Less than 1 EU/µg of rHuCYR61 as determined by LAL method.